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| 09/876,990 | 06/11/2001 | Shinji Negishi | SON-2141 | 1834 |
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| RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036 | | | EXAMINER LONSBERRY, HUNTER B | |
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| | | | 2611 | |

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,990

Applicant(s)

NEGISHI ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6 and 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see response, filed 7/28/05, with respect to the rejection(s) of claim(s) 3-6, and 8-11 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 6,658,199 to Hallberg.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-6 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moeller (U.S. 5,828,370) in view of Hallberg (6,658,199).

Regarding claims 3 and 5, Moeller discloses a data distribution apparatus comprising:

Receiving means for receiving a special playback request from an external source (commands received from a user set top box 50 and delivered to server 50, column 7, lines 27-37);

Data storage means for storing playback data (column 8, lines 24-47, DVDS, RAID etc), and also storing special playback data (trick play stream, column 8, lines 42-48) and splicing data (index table, column 9, lines 15-20, column 11, lines 17-37), both of which are used for playing back the playback data in a special mode;

Data switching means for reading the special playback data from said storage means in response to the special playback request received by said receiving means (column 10, line 60-column 11, line 5), and for reading the splicing data from said data storage means (column 10, line 60-column 11, line 5, the index lookup tables are referenced to determine which video to provide); and

Transmission means for transmitting the special playback data or the splicing data from said data switching means to the data-receiving terminal via a transmission medium (column 7, lines 34-38, figure 1, data is transmitted from video server 50, via ATM network 40 to a subscriber 52).

Moeller fails to disclose reading data according to a buffer state of a data-receiving terminal.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

Regarding claims 4 and 6, Moeller discloses that the splicing data is used to index the trick play and normal play streams, in order to determine an offset between the two streams, when a user starts a trick play stream the nearest offset is determined between the two streams and the trick play stream is then transmitted, likewise when switching from a trick play to a normal play stream, the nearest offset in the normal play stream is determined, and normal play data from that point is then transmitted, these offsets are data with different presentation times (column 10, line 43-column 11, line 16), thus the repeat data would be data which is in the normal play stream with a presentation time prior to the time in the trick play stream.

Regarding claim 8, Moeller discloses a data distribution method for reading special playback data from a storage unit 90 to a receiving terminal 52, said data storage unit storing playback data (column 8, lines 24-47, DVDS, RAID etc), and also storing special playback data (trick play stream, column 8, lines 42-48) and splicing data (index table, column 9, lines 15-20, column 11, lines 17-37), both of which are used for playing back the playback data in a special mode, said data distribution method comprising the steps of:

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Receiving a special playback request from an external source 52 (commands received from a user set top box 52 and delivered to server 50, column 7, lines 27-37);

Reading data stored in a data storage unit in response to the special playback request (the MPEG normal play and trick play streams are stored on a storage device, column 8, lines 42-48, column 9, lines 38-5, and are indexed together based on time, so that the positions are equivalent between the normal streams and the faster presentation trick play streams, column 9, line 51-column 10, line 41, the streams are transmitted to the user in response to a request, column 7, lines 34-38)

Reading the splicing data from said data storage unit (column 8, lines 55-64, column 9, lines 15-20, column 11, lines 6-37),

Transmitting the special playback data to the receiving terminal 52, via transmission medium 40 (column 6, lines 19-31).

Moeller fails to disclose reading splicing data according to a buffer state.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

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Regarding claim 9, Moeller discloses a data distribution method comprising the steps of:

Receiving a special playback request from an external source (commands received from a user set top box 50 and delivered to server 50, column 7, lines 27-37);

Reading data stored in a data storage unit in response to the special playback request (the MPEG normal play and trick play streams are stored on a storage device, column 8, lines 42-48, column 9, lines 38-51)

Decoding the read data so as to generate a special playback signal (column 8, lines 42-5)

Encoding the special playback signal so as to generate special playback data (column 8, line 55-column 10, line 3 MPEG encoded data); and

Transmitting the special playback data to a data-receiving terminal 52 via a transmission medium 40 (server 50, with communications interface which transmits over an ATM or IP network 40, column 6, lines 19-31).

Moeller fails to disclose reading the splicing data from the data storage unit according to a buffer state of the receiving terminal.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback

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capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

Regarding claim 10, Moeller discloses a data distribution system for distributing data, which includes special playback data from a data distribution apparatus comprising:

Receiving means for receiving a special playback request from an external source (commands received from a user set top box 50 and delivered to server 50, column 7, lines 27-37);

Data storage means for storing playback data (column 8, lines 24-47, DVDS, RAID etc), and also storing special playback data (trick play stream, column 8, lines 42-48) and splicing data (index table, column 9, lines 15-20, column 11, lines 17-37), both of which are used for playing back the playback data in a special mode;

Data switching means for reading the special playback data from said storage means in response to the special playback request received by said receiving means (column 10, line 60-column 11, line 5), and for reading the splicing data from said data storage means (column 10, line 60-column 11, line 5, the index lookup tables are referenced to determine which video to provide); and

Transmission means for transmitting the special playback data or the splicing data from said data switching means to the data-receiving terminal via a transmission medium (column 7, lines 34-38, figure 1, data is transmitted from video server 50, via ATM network 40 to a subscriber 52).

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Said terminal device 52 comprising:

Receiving means for receiving the data transmitted from said data distribution apparatus (column 6, line 66-column 7, line 11, and

Moeller inherently contains decoding means for decoding data received by the receiving means as Moeller discloses that the normal play streams are transmitted as MPEG data (column 6, lines 47-54) and an MPEG decoder is required in order to display the streams.

Moeller fails to disclose reading data according to a buffer state of a data-receiving terminal.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

Regarding claim 11, Moeller discloses a data distribution system (figure 1) for distributing data, which includes special playback data from a data distribution apparatus comprising:

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Receiving means (server 50, with network communications interface) for receiving a special playback request from an external source (commands received from a user set top box 52 and delivered to server 50, column 6, lines 18-31, column 7, lines 27-37);

Data storage means 62 for storing playback data (column 8, lines 24-47, DVDS, RAID etc), and splicing data (index table, column 9, lines 15-20, column 11, lines 17-37),

data storage means 62 for storing data (column 8, lines 24-47, DVDS, RAID etc);

decoding means 74 (MPEG decoder) for reading the data from said data storage means in response to the special playback request (user request) and for decoding the read data so as to generate a special playback signal (column 8, lines 42-55);

encoding means 76 (MPEG encoder 76) for encoding the special playback signal generated by said decoding means so as to generate special playback data (column 8, lines 55-column 10, line 3)

Data switching means for reading the special playback data from said storage means in response to the special playback request received by said receiving means (column 10, line 60-column 11, line 5), and for reading the splicing data from said data storage means (column 10, line 60-column 11, line 5, the index lookup tables are referenced to determine which video to provide);

transmission means (server 50, with communications interface which transmits over an ATM or IP network 40, column 6, lines 19-31), for transmitting the special

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playback data obtain by said encoding means 76, to a data receiving terminal 52 via a data transmission medium 40

Said terminal device 52 comprising:

Receiving means (Figure 2, STB coupled to a network via cable 58) for receiving the data transmitted from said data distribution apparatus (column 6, line 66-column 7, line 11), and

Moeller inherently contains decoding means for decoding data received by the receiving means as Moeller discloses that the normal play streams are transmitted as MPEG data (column 6, lines 47-54) and an MPEG decoder is required in order to display the streams.

Moeller fails to disclose reading splicing data according to a buffer state in a receiving terminal.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

Regarding claims 12-17, Moeller discloses a trick play video system.

Moeller does not disclose if the splicing data is read so that a locus of used bits of the buffer state of the receiving terminal is continuous.

Hallberg discloses a trick play video system which reads the buffer state of a buffer 54 in order to prevent buffer overflow, the number of frames to be transmitted (locus of used bits) are reduced until the system is capable of transmitting the trick play GOP within the systems capabilities (column 6, line 31-column 7, line 26).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Moeller to utilize the buffer status monitoring and playback capabilities of Hallberg for the advantage of preventing buffer overflow displaying a distorted video signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HBL



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